REMARKS

With this response, Applicants are sending replacement drawings removing reference sign 202 to address the Examiner's objection. Also, the informality pointed out by the Examiner in claim 68 has been removed.

With the present amendment, claims 33-68 are pending. Claims 33, 34, 43, 59. 60, 63, and 68 were rejected under 35 U.S.C. § 102(b) as being anticipated by Eadie, et al. (U.S. Patent No. 4,211,583). Claims 33-36, 55, 59. 60, 63-65, and 68 were rejected under 35 U.S.C. § 102(b) as being anticipated by Adkrom, et al. (U.S. Patent No. 4,044,427). Claim 42 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Eadie, et al. (U.S. Patent No. 4,211,583) in view of Hertzner (U.S. Patent No. 5,861,067). Claims 44-46 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Eadie, et al. (U.S. Patent No. 4,211,583) in view of Erikson, et al. (U.S. Patent No. 6,117,249). Claims 47-50 and 62 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Eadie, et al. (U.S. Patent No. 4,211,583) in view of Graf (U.S. Patent No. 6,289,588). Claims 49, 57, 58, 66, and 67 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Eadie, et al. (U.S. Patent No. 4,211,583) in view of Russo, et al. (U.S. Patent No. 5,298,095). Further, claims 37 and 51-54 were rejected under 35 U.S.C. § 103(a) as being unpatentable Eadie, et al. (U.S. Patent No. 4,211,583) in view of Hollingsworth (U.S. Patent No. 5,096,506). Claims 38-41, 56 and 61 were indicated as allowable but objected to as being dependent upon a rejected base claim.

Claims 38 and 61 have been amended to be placed into independent form and are now in condition for allowance. Claims 39-41 depend from claim 38. Claim 39 has been amended to correct a grammatical error and the substance of the claim has been

unaltered. Therefore, Applicants respectfully submit that claims 39-41 are also in condition for allowance.

Applicants respectfully submit that the claims 33-68 patentably define over the art of record for at least the reasons set forth herein.

Independent claim 33 discloses a process for production of a disintegration roll. In the process, a shredding element is converted into a preparative configuration that corresponds to a finished configuration the shredding element assumes on the disintegration roll. At least a portion of the shredding element is hardened while it is in the preparative configuration. The hardened shredding element is then used on a shredding element carrier created from a non-hardening material. Similarly, independent claim 60 discloses a disintegration roll including a shredding element carrier created from a non-hardening material having an outer circumference and a shredding element operably mounted to the outer circumference of the shredding element carrier. The shredding element is preshaped to conform to the outer circumference of the shredding element carrier and at least partially hardened in this preshaped form. Respectfully, the process for manufacturing a disintegration roll and the disintegration roll patently defines over all cited prior art. Specifically, Eadie, et al. and Adkrom, et al. do not disclose such a process or disintegration roll.

Eadie, et al. discloses a card-clothing wire for use on rollers of a textile machine. The wire is coiled into a helical formation before the wire is subjected to a chromium diffusion process to provide a hardened outer surface layer to the wire. However, Eadie, et al. does not disclose having the carrier on which the wire is used to be created from a non-hardening material as independent claims 33 and 60 of the present invention claim.

Adkrom, et al. discloses a comber roll having a plastic core with a pretreated card-clothing wire wrapped around the plastic core. The comber roll is then subjected to an annealing step to "settle" the plastic around the wire to further retain the card clothing wire in the comber roll before the plastic core is post cured. Applicants respectfully submit that Adkrom, et al. discloses neither a process where the card clothing wire is configured to the shape of the comber roll before it is hardened in that configuration and used on a core of a comber roll made of a non-hardening material nor a comber roll having a core created from a non-hardening material that has had its card clothing wire hardened in a preparative configuration.

First, Adkrom et al. does not perform a step of hardening the card clothing wire when the wire is configured to the shape of the comber roll. The card clothing wire in Adkrom, et al. is provided with an extremely hard wear-resistant coating before the card clothing wire is shaped around the plastic core to form the comber roll. The installation and the shaping of the clothing wire is not done until the fabrication of the clothing wire is finished. The comber roll is then heated to "settle" the plastic around the wire. The comber roll is not heated to harden the card clothing wire. The process to heat and cure the plastic is totally different from a process to harden a metal wire. The temperatures used, the cooling carried out, and other procedures performed during each process are different. In fact, the temperatures used to harden steel (described in Adkrom et al. as the material out of which the card clothing wire is made and heated to 900° F or above in the hardening process as known in the art) would cause Delrin ®, the plastic suggested by Adkrom et al., to become unstable and even burn. (See pp. 3 and 5 of the MSDS Sheet on Delrin ® provided herewith.)

Second, Adkrom et al. does not provide a core, which is made of a non-hardening material, for the comber roll. Curing when associated with resins connotes the hardening of the resin. The core of the comber roll in Adkrom et al. is a plastic which is heated and then cured to harden the plastic around the card clothing wire. The plastic core disclosed in Adkrom et al. is created from a material that hardens. Therefore, Adkrom et al. does not disclose a shredding element carrier created from a non-hardening material.

For at least these reasons, the process of forming the comber roll and the actual comber roll in Adkrom et al. do not anticipate independent claims 33 and 60.

Similarly, Adkrom, et al. does not anticipate claims 35 now written in independent format. Adkrom, et al. does not disclose a process wherein the shredding element stays on a preshaping body during the hardening of at least a portion of the shredding element as in claim 35, since, as discussed above, Adkrom, et al. does not disclose the preshaping or configuration of its card clothing wire before hardening of its card clothing wire at all. Adkrom et al. discloses only the curing of the plastic core of the comber roll and does not disclose the hardening of at least a portion of the shredding element when the shredding element is in a preshaped configuration.

For at least these reasons, Applicants submit that independent claims 33 and 60 are patently distinguishable from Eadie, et al. and Adkrom, et al., and independent claims 35 is patently distinguishable from Adkrom, et al. Therefore, Applicants respectfully submit that independent claims 33 and 60 are allowable. Since claims 34, 37, 42-54, and 56-59 depend from claim 33 and claims 62-63 and 65-68 depend from claim 60, these claims are also allowable. Further, claim 36, which depends from claim 35, is allowable. As stated above, Claims 38 and 61 have been amended into

independent form and are now allowable. Claims 39-41 depend from claim 38. Therefore, Applicants respectfully submit that claims 39-41 are also allowable. Applicants submit that the application is now in condition for allowance and favorable action thereon is respectfully requested. The Examiner is encouraged to call the undersigned at her convenience to resolve any remaining issues.

Respectfully submitted,

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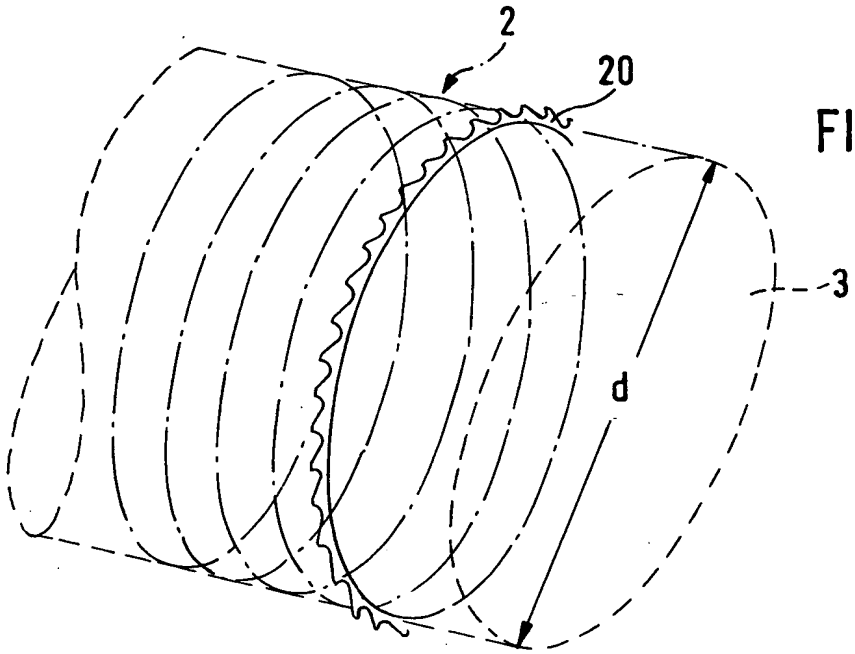

FIG.1

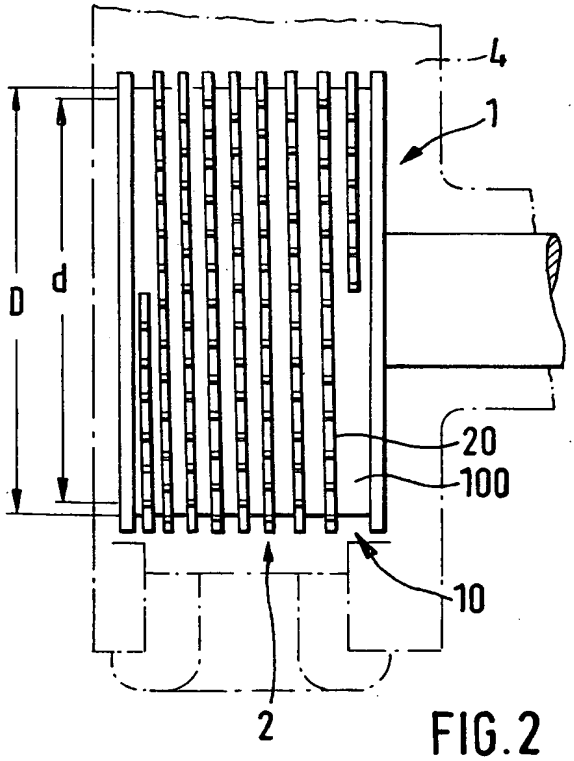

FIG.2

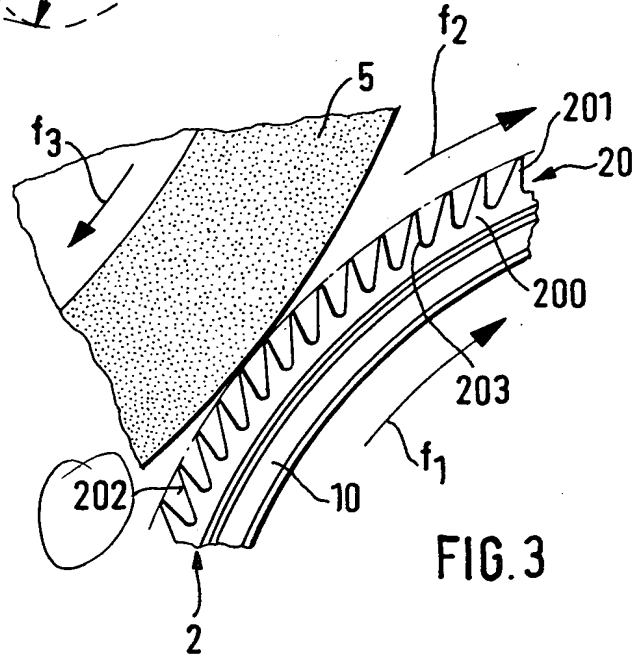

FIG.3